Complete Summary

GUIDELINE TITLE

Adapting your practice: treatment and recommendations for homeless patients with HIV/AIDS.

BIBLIOGRAPHIC SOURCE(S)

Menchaca M, Martinez L, Stewart J, Treherne L, Vicic W, Audain G. Post P, editor(s). Adapting your practice. Treatment and recommendations for homeless patients with HIV/AIDS. 2nd ed. Nashville (TN): Health Care for the Homeless Clinicians' Network, National Health Care for the Homeless Council, Inc.; 2008. 62 p. [118 references]

GUIDELINE STATUS

This is the current release of the guideline.

This guideline updates a previous version: Conanan B, London K, Martinez L, Modersbach D, O'Connell J, O'Sullivan M, Raffanti S, Ridolfo A, Post P, Santillan Rabe M, Song J, Treherne L. Adapting your practice: treatment and recommendations for homeless patients with HIV/AIDS. Nashville (TN): Health Care for the Homeless Clinicians' Network, National Health Care for the Homeless Council, Inc.; 2003. 62 p. [50 references]

** REGULATORY ALERT **

FDA WARNING/REGULATORY ALERT

Note from the National Guideline Clearinghouse: This guideline references a drug(s) for which important revised regulatory and/or warning information has been released.

- July 24, 2008, Ziagen (abacavir sulfate): The U.S. Food and Drug Administration (FDA) has notified the maker of abacavir and abacavir-containing medications of the need to add information to the current BOXED WARNING about the recommendation to test all patients for the HLA-B*5701 allele before starting or restarting therapy with abacavir or abacavir-containing medications.

COMPLETE SUMMARY CONTENT

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SCOPE

DISEASE/CONDITION(S)

- Human immunodeficiency virus (HIV) infection
- Acquired immune deficiency syndrome (AIDS)

GUIDELINE CATEGORY

Counseling
Diagnosis
Evaluation
Management
Prevention
Treatment

CLINICAL SPECIALTY

Cardiology
Dermatology
Family Practice
Hematology
Infectious Diseases
Internal Medicine
Nephrology
Neurology
Nutrition
Obstetrics and Gynecology
Pediatrics
Psychiatry
Psychology
Pulmonary Medicine

INTENDED USERS

Advanced Practice Nurses
Dietitians
Health Care Providers
Nurses
Pharmacists
Physician Assistants

Physicians
Psychologists/Non-physician Behavioral Health Clinicians
Social Workers
Substance Use Disorders Treatment Providers

GUIDELINE OBJECTIVE(S)

To promote continuing improvement in the quality of HIV care provided to individuals whose lack of financial and social resources complicate the treatment and self-management of their chronic disease

TARGET POPULATION

Homeless male and female adults and adolescents (including pregnant women and those with severe mental illness) with human immunodeficiency virus (HIV) and acquired immune deficiency syndrome (AIDS)

Special populations:

- Homeless women
- Homeless youth
- Sexual minorities
- Immigrants

INTERVENTIONS AND PRACTICES CONSIDERED

Diagnosis/Evaluation

1. **Patient history**, including review of systems, current living situation, history of homelessness, social history, regular activities, medical history and previous providers, behavioral health history, history/current risk of abuse, alcohol/drug use, sexual history/current practices, reproductive history, work history, history of detention/incarceration, literacy, assessment of nutrition/hydration, and cultural and religious history
2. **Physical examination**, including comprehensive versus focused examination(s); special care for victims of abuse and sexual minorities; touch therapy; recognizing signs and symptoms of human immunodeficiency virus (HIV) complications and a failing immune system; dermatological exam; neurological/psychiatric evaluation; dental/retinal exams
3. **Diagnostic tests**, including HIV antibody test, oral swab rapid test, finger-stick whole blood assay, confirmatory test if needed, pre- and post-testing counseling, baseline laboratory tests including liver function, virologic test for HIV viral load, drug resistance assay, HLA B-5701 testing, purified protein derivative (PPD) tuberculin skin testing or blood assay (Quantiferon) every six months, chest x-ray, hepatitis testing, Papanicolaou (Pap) smear, pregnancy test

Management/Treatment

1. **Plan of care**, including establishing an interdisciplinary clinical team; assessing patient's needs, priorities, and goals; helping the patient in

applying for governmental assistance; eliciting patient feedback to confirm understanding of the plan of care

2. **Education/self-management**, including basic education about HIV infection, transmission, and therapy; discussing ways to reduce HIV risks; addiction management; written instructions/reminders; using treatment advocates and peer educators; directly observed therapy (DOT); educating patients about side effects management, urgent medical problems, and the importance of a regular source of medical care; fostering supportive relationships to combat stigmatization/isolation; providing nutrition counseling; educating medical providers about the special need of homeless patients
3. **Medications**, including psychotropics for mental illness; methadone for heroin addiction; prophylaxis for opportunistic infections and tuberculosis (if tuberculin test is positive), treatment and management of uncontrolled hypertension, diabetes, and seizures; immunizations (influenzae vaccine, pneumococcal vaccine, hepatitis A and B vaccines, tetanus, diptheria, pertussis [Tdap] vaccine); establishing HIV treatment readiness; "practice" medication (placebo or vitamins) for a week or two; use of simple antiretroviral treatment regimen (once daily/3 times weekly, as clinically indicated); opportunistic infections prophylaxis; pain medication; exploring/addressing obstacles to adherence
4. Recognizing and managing **associated problems and complications**, such as medication side effects, severe drug toxicities, drug-drug interactions; problems with medication storage/access; mental illness, substance use disorders, cognitive impairment; tuberculosis, hepatitis, abuse, pregnancy, more advanced disease secondary to delayed care (lack of transportation and stable housing, barriers to health insurance and disability assistance); incarceration, needs of special populations (women, youth, sexual minorities, immigrants)
5. Facilitating return for **follow-up** by identifying multiple ways to contact the patient; creating a drop-in system, reminders and incentives for kept appointments; providing transportation, intensive case management and peer support

MAJOR OUTCOMES CONSIDERED

- Human immunodeficiency virus (HIV) prevalence rate
- Acquired immunodeficiency syndrome (AIDS) prevalence rate
- AIDS case rate
- CD4 counts, viral loads in patients receiving active antiretroviral therapy (ART)
- Treatment adherence
- Health status
- Morbidity
- Mortality

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Hand-searches of Published Literature (Primary Sources)
Hand-searches of Published Literature (Secondary Sources)
Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

MEDLINE/PubMed, Medscape, and research databases (including SocABS, and PsycInfo) were searched quarterly to produce the National Health Care for the Homeless Council's HCH Research Updates (http://www.nhchc.org/researchupdates.html). HIV/AIDS references listed on the Homelessness Resource Center website (http://www.nrchmi.samhsa.gov/), a program of the U.S. Department of Health and Human Services Substance Abuse & Mental Health Services Administration, Center for Mental Health Services, were also searched.

NUMBER OF SOURCE DOCUMENTS

This guideline is adapted from two primary sources.

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Expert Consensus

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Not applicable

METHODS USED TO ANALYZE THE EVIDENCE

Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

In 2002–2003, 11 health and social service providers experienced in the care of homeless individuals with human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS) developed the original edition of these adapted clinical guidelines, drawing from their own experience and from that of 28 other practitioners working with HIV-infected homeless persons across the United States. In 2008, an advisory committee, including some of the original authors, reviewed and revised these recommended clinical practice adaptations to assure

their consistency with updated U.S. Public Health Service guidelines for the diagnosis and management of HIV/AIDS and with best practices in homeless health care.

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

Clinical Validation-Pilot Testing
External Peer Review
Internal Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

The guideline developer's Advisory Committee identifies, in the original guideline document the clinicians who reviewed and commented on the draft recommendations (both the 2003 edition and the 2008 update) prior to publication, including experienced Health Care for the Homeless practitioners and medical experts in human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS) care. The original guideline was field tested by clinicians in designated Health Care for the Homeless projects during the summer of 2003. Evaluation criteria included clarity, flexibility and ease of use; relevance to the care of homeless clients or those at risk of becoming homeless; inclusion of strategies to promote outreach and case management and ensure follow-up; sufficiently detailed to ensure that similar practitioners would offer similar treatment in the same circumstances; and sufficiently complete to enable new clinicians to use them for homeless clients. Evaluators found that the guideline met all of these criteria and recommended future development of abbreviated versions of this and other adapted clinical guidelines to facilitate use in a variety of clinical settings.

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

Diagnosis and Evaluation

History

- **Review of systems** *Identify symptoms that suggest the presence of opportunistic infections requiring immediate intervention. Assess for chronic symptomatology* (diarrhea, weight loss, increasing fatigue, fevers/night

sweats, etc.); ask if a work-up has ever been done to determine what is causing reported symptoms.

- **Current living situation** Lack of stable housing complicates health care and adherence to human immunodeficiency virus (HIV) treatment. *At every visit, document the patient's housing status, living conditions, and contact information*. Assess residential stability by inquiring, "What is your current living situation? How long you think you can stay where you are staying?" If living on the streets, ask for how long. "Where did you stay last night and where do you think you will stay tonight?" "Do you have access to shelters?" "What is your experience with shelters?" (Some patients feel safer camping outside than staying in crowded shelters; others don't want to separate from partners, as most shelters require.) *Ask where the patient spends time during the day and how s/he can be contacted. Inform him/her how to contact the clinical team. Ask explicitly how basic needs are met (food, shelter, restrooms) and where medications can be stored*.
- **History of homelessness** If staying in a shelter, a vehicle, on the street, or in any other unstable living situation, *ask if this is the first time the patient has been without a home*. Recognize that living with a series of friends or family members ("couch surfing") or in overcrowded situations with multiple families may also indicate residential instability, which is fundamental to homelessness*. If there were prior episodes of homelessness, *try to determine whether lack of a stable living situation is chronic or episodic*. (Individuals who have been homeless for a long time tend to have established routines in seeking to meet basic needs, whereas those who are recently homeless may present as less organized and may not be aware of available resources). Assess the patient's resourcefulness by asking what changes enabled him/her to obtain housing or shelter. If currently homeless, *try to understand the circumstances that precipitated homelessness* (e.g., unemployment, bad luck, poverty, abuse, alcohol or drug problems, mental illness), *and inquire about options for stable housing that might be acceptable to the patient*.

*"A homeless person is an individual without stable or permanent housing, who may live on the streets or stay in a shelter, mission, single-room occupancy facility, abandoned building, vehicle, or 'doubled up' with a series of friends and extended family members. Individuals who are to be released from a prison or hospital may be considered homeless if they do not have a stable housing situation to which they can return. Recognition of the instability of an individual's living arrangement is critical to the definition of homelessness." (Principles of Practice: A Clinical Resource Guide for Health Care for the Homeless Programs, Bureau of Primary Health Care, HRSA, DHHS, March 1999; PAL 99–12)

- **Social history** Lack of social supports, stable housing, and other unmet basic needs can present serious impediments to maintaining reliable communications with caregivers. Obtain a detailed social history; *ask about the patient's family, extended family, and current social supports* (living parents and siblings, marital history or partners, ongoing relationships) to determine the patient's degree of isolation. Many homeless HIV patients aren't in touch with family members or friends. *Ask who might make decisions for them in the event of serious illness that requires hospitalization*. When trust is established, begin to *lay the groundwork for a discussion of advance directives and end-of-life care*.
- **Regular activities** Awareness of how the patient spends time each day will help service providers identify and address potential barriers to care. *Ask if the patient has any sort of schedule or daily routine*. ("How many times do you eat each day? How many meals did you eat yesterday? Do you get up at

a certain time? Go to the same places or engage in particular activities every day?") *Explore evidence of consistency in the patient's life to assess whether a medical regimen can be integrated into his/her regular schedule of activities*. Ask what activities the patient most enjoys and which of these activities are possible under current circumstances. Improving quality of life can help to increase motivation and capacity for self-care. Many homeless people spend much of their time in lines for food, shelters, or appointments.

- **Medical history** *Ask if the patient has ever been hospitalized and if so, why*. Request medical records from hospitals and other clinicians to gather information about prior diagnoses and treatments. Obtaining complete medical records may be difficult for migrant and highly mobile patients. *If a diagnosis of HIV infection has already been made, ask when the initial diagnosis was made and how s/he became infected*. Knowing the likely route of infection may facilitate harm reduction. *Inquire about the patient's initial, lowest, and most recent CD4 counts, last viral load, and history of opportunistic infections (OIs). Ask if s/he has ever taken medications for HIV and if so, which ones and for how long. Ask if the patient is currently receiving antiretroviral therapy and/or OI prophylaxis. Inquire about side effects and reasons for any changes in medication or discontinuations*. If medical records and patient recollection are insufficient to identify specific medications taken, ask if the patient can show you old prescriptions or medicine bottles. If the patient has been off medications for a while due to interruption of previous health services, try to contact the pharmacy that last supplied medications.

  Ask if the patient had a positive tuberculin test, received treatment for latent or active tuberculosis, when and where. Contact the treating facility to confirm that treatment was completed. *Ask about a history of/exposure to hepatitis and sexually transmitted diseases (syphilis, gonorrhea [GC]/chlamydia, herpes)*. Ask about *vaccinations*, including the hepatitis A and B series, pneumonia and tetanus. Ask female patients *when the last Pap smear was performed* and obtain a history of any previous Pap smear results as well as treatment.

- **Previous providers** Homeless patients typically see a series of providers in different programs. *Ask why the patient is changing services and/or providers and what his/her expectations are. Contact the prior medical provider to discuss the transfer of care and specific issues*, and to avoid duplication of services.
- **Behavioral health history** *Ask whether the patient has ever been treated or hospitalized for a mental health or substance use problem and whether s/he is currently taking psychotropic medications*. Assess for depression and bipolar disorder; *evaluate mood, cognitive function, and general outlook*. Ask about major stressors and coping mechanisms. If a resource is available, ask if s/he is interested in psychotherapy. Encouraging a person to talk about his or her life may provide insight into emotional status and priorities, allowing the clinician to understand the patient better.
- **History of abuse/current risk** Many homeless people have experienced physical and/or sexual abuse (Henny et al., 2007). Some have been "self-medicating" with alcohol or drugs for most of their lives to alleviate the residual effects of trauma (posttraumatic stress disorder). These activities may enhance their risk for HIV infection. Assess for a history of emotional,

physical, or sexual abuse and exploitation; *ask all patients if they have ever been physically hurt, afraid of being hurt, or forced to engage in sexual acts*. Sexual victimization is not limited to women, although high percentages of poor and homeless women have been victims of physical or sexual abuse (Lee & Schreck, 2005; Wenzel, Leake, & Gelberg, 2005; Browne & Bassuk, 1997). *Routinely assess for violence, abusive relationships, and patient safety* (whether knowledge of HIV infection may precipitate abuse against the patient or a partner).

- **Alcohol/drug use** *Ask about current and previous use of alcohol and drugs, including nicotine*. Inquire about *drug(s) of choice, including inhalants*, recognizing that many users have tried several psychoactive substances. Ask about *frequency and pattern of use*. (Some patients tend to engage in binge drinking or drug use while others are daily users.) If engaging in intravenous/injection drug use (IDU), *ask about injection practices and access to clean needles*. Ask whether the patient has ever experienced blackouts or had seizures. Asking questions in a natural, nonjudgmental manner establishes rapport and makes it easier for patients to talk about substance use — e.g., "When was the last time you used/got high? On what? How do you get high (injected, smoked or snorted)? Have you ever been in a drug treatment or smoking cessation program? If so, what was the outcome? What is the longest period you have been clean and sober?" *Ask how periods of sobriety were achieved*, and use this information to help guide subsequent interventions and treatment planning.
- **Sexual history/current practices** *Ask about specific sexual practices that may place the patient or sex partner(s) at risk for HIV infection. Ask whether the patient has sex with men, women or both*. Ask the same questions of both males and females in a nonjudgmental way. Recognize that some sexual activities are not regarded by all persons as "sex." Ask whether the patient has been forced to have sex. Ask whether he or she is currently using contraception. *Ask about condom use* (other forms of contraception do not confer protection against HIV transmission). *Inquire about sex work* and how the individual negotiates condom use.
- **Reproductive history** Ask female patients about past and/or current pregnancies (number of pregnancies, live births, and stillbirths) and any complications, such as preterm birth or eclampsia. *Ask HIV-infected women whether any of their children were HIV-infected, whether they received drugs during pregnancy to prevent perinatal transmission of HIV (antiretroviral prophylaxis), and if so, which ones*. Ask about birth control practices and desire for family planning.
- **Work history** *Ask what types of work the patient has done and the longest time s/he held a job*, to identify abilities and interests, assess stability, and determine risk for comorbidities associated with *toxic exposure* (e.g., to asbestos, silica, coal). Ask about *work-related illness or injuries* and *military service*.
- **History of detention/incarceration** *Ask whether the patient has been detained by police or incarcerated, and if so, whether s/he ever received medical treatment while incarcerated*. Housing options may be closed to previously incarcerated people. A history of incarceration is associated with increased risk for HIV and hepatitis (Weinbaum et al., 2005). Admission to/discharge from criminal justice facilities may interrupt continuity of care and treatment adherence. In many communities, when homeless persons are arrested, even for a public nuisance offense such as loitering or public urination, any medications they have with them may be confiscated and not

returned. *Establish a working relationship with health care providers at local jails to promote continuity of care*. Address the risk of drug overdose after release with patients using drugs (especially heroin) who have a history of detention or incarceration.

- **Literacy** A number of homeless people have trouble reading. They may be illiterate or have a low literacy level in their primary language and/or in English, if it is not their native tongue. (A patient may speak but not read English while being literate in Spanish, for example.) Assuming erroneously that the patient can read directions on medicine bottles or an appointment card can lead to serious complications and loss to follow-up. Patients who cannot read may not volunteer this information out of embarrassment or shame. *Use the intake form as a non-threatening way to evaluate the patient's reading ability to read instructions in English or their primary language*. Ask, "Do you want help filling this out?" "Are you comfortable reading?" or "Do you have trouble reading?" This can allow patients to save face, since "trouble reading" can indicate either vision or literacy problems.
- **Nutrition/hydration** Poor nutrition and inadequate hydration are endemic among indigent and homeless people. Even those who are overweight are at high risk for malnourishment because of diets high in fat, salt, and carbohydrates and low in vitamins and minerals. All patients should have an initial nutritional assessment. Special attention to nutritional status and intake is especially important for pregnant patients. *Look for signs and symptoms of malnutrition and dehydration. Ask about diet and eating habits. Evaluate the patient's knowledge of proper diet and food resources* (pantries, soup kitchens, delivered meals, and nutritional supplements including vitamins), as well as *cooking skills and availability of cooking facilities. If the patient is not eating well, determine the reasons why* -- e.g., limited access to nourishing food, poor dentition, use of financial resources to purchase illicit drugs/prescribed medications or shelter instead of food. *Inquire about access to water and other liquids*, especially in summer months. Adequate hydration is necessary to avoid some medication side effects.
- **Community** *Elicit information about the patient's cultural heritage and religious or spiritual history and affiliation*. This information can help the clinical team develop an approach to care that is responsive to the patient´s belief and value system. Some patients who are difficult to follow can be contacted through faith communities. *Ask about attitudes of the patient's family, friends, community, and cultural group toward HIV risk behaviors and persons who contract the virus.* Stigmatization of HIV-positive persons is more severe in some cultures than others. For example, in some communities it is more shameful for Latino males than for other homeless men to admit certain behaviors that increase their risk for HIV. Consequently, they may not seek screening as readily as other clients.

Physical Examination

- **Comprehensive versus focused examination(s)** Patients with a history of sexual abuse or negative experiences with the medical system may take more time to engage in a therapeutic relationship. *For such patients, focused physical examinations may be necessary initially, especially in outreach settings; reserve comprehensive examinations for the clinic with appropriate privacy and space*. To enhance patients' comfort level, some medical providers promote informality by dressing casually and inviting patients to call

them by their first name. If the patient prefers not to disrobe at the first visit, conduct serial, focused examinations (e.g., examine the patient's feet, listen to his or her chest) and defer the genital examination until the patient's comfort level allows, especially for a young adolescent or if a history of sexual abuse is suspected. Sensitivity to the patient's needs will promote trust and make her or him more at ease at subsequent visits.

Homeless women Women with HIV infection have higher rates of cervical dysplasia, human papilloma virus, and vaginal candidiasis than do women without HIV infection. Homeless women with a long history of physical/sexual abuse often resist routine pelvic and breast exams, exacerbating their risk for negative outcomes (O'Connell and Lebow, 1992). *Whenever possible, offer female patients the option of being examined by a health care provider of the same sex. To decrease anxiety, explain the importance of a vaginal examination and discuss the procedure before examining. Never uncover or touch the patient without asking permission first*. Some patients are more comfortable entering the examination room if a friend or case manager accompanies them. Close evaluation to detect cervical dysplasia and carcinoma in situ is critical to avoid progression to cancer. This should be accompanied by careful examination of the vulva, vagina and rectum. *Include routine assessment for evidence of physical or sexual abuse*. Women of child-bearing age should also be examined to determine if they are pregnant. If so, try to determine the gestational age of the fetus and assess for possible complications of pregnancy; refer to obstetricians with HIV expertise. Women over age 50 should receive mammograms.

Sexual minorities Homeless people with a non-traditional sexual orientation or gender identity (gay, lesbian, bisexual, transgender) experience even greater obstacles to health care than do other homeless people, and may not have seen a primary care provider for years. Many clinicians are uncomfortable examining individuals whose gender expression diverges from cultural norms and are insensitive to their health care needs (Herbst, 2008). *Be aware that: a biological male taking estrogen needs to have mammograms; a female taking testosterone still requires a Pap smear, breast exam, and mammograms; patients who have had sexual reassignment surgery require genital examination as part of regular health care maintenance; and any patient with a silicon or other implant, regardless of gender or sexual orientation, should receive both physical and radiological examinations*. As with all patients, *listen to concerns nonjudgmentally*. Treat each client as a unique individual and provide respectful, compassionate care.

- **Touch therapy** Many homeless persons with HIV have not been touched for a long time and may be shunned or physically/emotionally abused by other homeless people and service providers if their condition is disclosed. Shake hands to ameliorate the patient's sense of being an "untouchable" because s/he is dirty or has HIV. *Do not hesitate to express empathy with appropriate physical contact (hand shake, shoulder touch); but pay attention to nonverbal signals and recognize that some patients, particularly those experiencing paranoia, may find physical contact threatening, even outside the examining room*.
- **Signs and symptoms of HIV** Recognize the signs and symptoms of HIV complications and a failing immune system, *including oral candidiasis*

(thrush), oral leukoplakia, shingles, dermatitis, weight loss, cough, chronic diarrhea, dementia, vision loss or changes, and recurrent fevers. Realize that HIV-infected persons who are homeless are at higher risk for some of these conditions (e.g., tuberculosis and bartonellosis) than are those with stable housing. Weight loss and dehydration can be hastened or exacerbated by homelessness, and HIV symptoms may be difficult to differentiate from comorbidities in multiply diagnosed patients. Change in mental status may be secondary to chronic mental illness/substance abuse, opportunistic infection, and/or neurological changes associated with acquired immune deficiency syndrome (AIDS). *Always obtain full vital signs, including weight and pulse oxygenation*.

- **Dermatological exam** Thoroughly examine the patient's skin and oral mucosa on a regular basis. *Look for skin growths, rashes, and fungal infections in the mouth, groin, and feet*. Due to heavy sun exposure experienced by many homeless persons, *routine screening for signs of skin cancer* is also necessary. *Be aware of medications that precipitate sensitivity to sun exposure (i.e., sulfas drugs) and encourage sun block use*, as possible. Dirty skin may complicate the assessment, as many homeless people have no place to bathe. Due to poorly fitting shoes and minimal access to clean socks and water for bathing, foot problems (*tinea pedis*, fungal infections, "trench foot") are commonly seen in homeless patients. Rule out HIV disease in any patient with oral candidiasis ("thrush"), which is usually a sign of immune compromise (not secondary to homelessness). Eosinophilic folliculitis (EF) is the most common skin disease seen in HIV-infected persons. Many skin diseases such as seborrheic dermatitis are exacerbated by HIV. Skin infestations like scabies and "bed bugs" are extremely common (HCH Clinicians' Network, 2006). Peripheral vascular disease and venous stasis are more difficult to manage if the patient is homeless. Corns, blisters, and skin ulcers are other common problems. *Pay special attention to genital and rectal warts, skin problems associated with injection drug use, and foot care*.
- **Neurological/psychiatric evaluation** Perform a thorough neurological examination and mental health evaluation as the patient's comfort level allows. Recognize that depressive symptoms are associated with discontinuation of antiretroviral therapy (ART) (Kim et al., 2007; Moss et al., 2004). It is often necessary to explore only briefly at the first encounter and continue the evaluation at subsequent visits. *Ask whether the patient has had any "mental health issues"* rather than "mental illness." If emotional problems are suspected, ask if the patient would like an appointment with someone (preferably a mental health professional on the clinical team) to discuss his or her concerns further. *Assess for mental illness, substance abuse, and evidence of cognitive impairment. Screen for domestic violence and post-traumatic stress disorder*. Effects of HIV on the central nervous system may be confused with those of substance use, psychiatric disorders, or medication side effects. HIV infection and treatment can also trigger and exacerbate underlying mental illness. Be aware that the first signs and symptoms of serious mental illness can be secondary to AIDS dementia, CSN infection, or lymphoma. People with underlying psychiatric disorders, especially post-traumatic stress disorder (PTSD), may be self-medicating with alcohol or street drugs; it is important to explore this during the mental health evaluation.
- **Dental/vision exams** Dental problems secondary to HIV are difficult to distinguish from bad dentition in homeless individuals, whose access to oral health and vision care is often limited. *Make every effort to include a dentist*

on the clinical team, as well as an optometrist or ophthalmologist to do retinal exams. Portable equipment allows for dental outreach in homeless service sites.

Diagnostic Tests

- **HIV testing/screening** Standard clinical guidelines currently recommend HIV screening in all health care settings without requiring written consent (CDC, Workowski, & Berman, 2006). Two forms of rapid testing have been shown to increase patient willingness to be tested: *the oral swab rapid test and a finger-stick whole blood assay*; both demonstrate comparable specificity and sensitivity with proper use. *Rapid testing is especially useful in outreach settings and strongly recommended for homeless/runaway youth*. Persons at high risk for HIV infection should be tested annually. *Offer testing to partner(s) of HIV-positive patients*; provide an incentive (e.g., grocery store voucher) to those who bring partners for testing. *Offer testing to children of HIV-infected persons, if not already tested, regardless of age*

  Offer HIV testing only in settings where facilities, expertise, and support are available to provide or assure immediate access to HIV care. Facilities that provide only outreach and HIV testing must provide direct linkage to care providers and assertive case management to assure that homeless individuals will have access to care. Mobile units can be an effective means of outreach to persons who otherwise would not seek testing or care, including those who are homeless. Optimally, outreach staff should include a medical provider to initiate contact and establish rapport with new patients. Mobile testing programs should provide immediate referrals to an HIV clinic for patients who test positive. *Engagement in clinical care, prevention counseling, and supportive services is essential for persons with positive HIV test results, even if the patient is not ready for HIV therapy—to provide emotional support, reduce HIV transmission, and initiate prophylaxis, if needed*.

- **Pre-test counseling** Prevention counseling should not be required as part of HIV testing programs in health-care settings, but is strongly encouraged for high-risk persons in settings where HIV risk behaviors are assessed routinely, such as sexually transmitted infection (STI) clinics (CDC, Workowski, & Berman, 2006). *Give patients the option to decline an HIV test (opt-out screening), but invite them to ask questions and receive information about what the test means*.
- **Confirmatory test** A negative HIV screening test does not require further testing (although retesting is recommended for persons with known or possible exposure to HIV within the last 3 months), but a positive test should be confirmed before the individual is told that he or she is infected. *If an initial screening test (oral mucosal, rapid test, or standard blood test) is positive, do a confirmatory test (Western blot or immunofluorescence assay)* (CDC, Workowski, & Berman, 2006).
- **Post-test counseling** *Be sure the patient is engaged in care when a positive test result is communicated*. For some patients, having HIV test results immediately is clinically necessary. Receiving an HIV diagnosis is as devastating to someone who is homeless as to someone who is not. *Be personally available when the patient returns for test results, and maintain contact with him/her. If the test result is positive, listen to the patient and be*

sure that contact with medical and social care is made. Use peer counselors (HIV-infected homeless or formerly homeless individuals who have done well) to talk to the patient and provide social support.

- **Laboratory tests** Perform baseline laboratory tests as specified in standard clinical guidelines (DHHS, "Guidelines for the use of antiretroviral agents in HIV-1-infected adults and adolescents," 2008), including a complete blood count (CBC), *electrolytes, glucose, blood urea nitrogen (BUN) and creatinine, liver function tests, lipid studies, urinalysis toxoplasmosis gondii immunoglobulin G (IgG) antibody, rapid plasma reagin (RPR) or venereal disease research laboratory (VDRL), hepatitis A antibody total (Hep A, Total), hepatitis B surface antibody (HBsAb), hepatitis B surface antigen (HBsAg), and hepatitis C antibody (Hep C Ab)*. Perform diagnostic tests at the first visit and review lab results at the next encounter. *Pay more attention to liver function tests in a homeless patient, whose risk for liver damage (secondary to hepatitis, alcoholic cirrhosis) is high*. Patients on hormones should also have regular monitoring of liver functions.
- **HIV viral load** *Perform HIV viral load test* (e.g., HIV-1 RNA quantitative assay or branched chain DNA assay (bDNA)) *at baseline exam and every 3–4 months if the patient is stable on therapy*. Also, check HIV viral load *when acute retroviral syndrome is suspected*. Avoid HIV RNA assay following single positive rapid antibody test unless the patient reports a prior positive HIV test.
- **HIV resistance testing** *Baseline genotypic resistance testing* is recommended for all patients prior to initiation of ART and for treatment failure with HIV-1 RNA levels of more than 500–1000 copies/ml while patient is taking failing regimen (DHHS, "Guidelines for the use of antiretroviral agents in HIV-1-infected adults and adolescents," 2008; Hammer et al., 2008). *Phenotypic assays* are used in combination with genotypic assays for patients with multidrug resistance. Many homeless patients are treatment-naïve due to limited access to health care and may therefore have more therapeutic options because of less resistance due to past treatment failure. Nevertheless, since *6–16% of the population naïve to treatment has at least one major resistance mutation in their wild-type virus, resistance testing is still an important component of initial evaluation when planning to start ART*.
- **HLA*B-5701 testing** *Test all patients for HLA*B-57 prior to initiating an abacavir containing regimen* (if assay is available). Any patients testing positive for HLA*B-57 should not be prescribed abacavir as they have a 50% chance of having severe hypersensitivity reaction to the medication.
- **Tuberculin test** *Test HIV- infected persons for latent or active tuberculosis (TB) as soon as their HIV status becomes known using a Tuberculin Skin Test (TST/purified protein derivative [PPD]) or blood assay test (QuantiFERON Gold TB test [QFT-g])*. A blood assay test can be used in all circumstances in which the TST is used but does not require the patient to come back for a reading. Its limitations are similar to those of the TST (Centers for Disease Control and Prevention [CDC], 2005). Although standard practice guidelines recommend annual repeat testing of high-risk patients who have negative tuberculin tests on initial evaluation (DHHS, "Guide for primary health care providers," 2005), *a number of HCH practitioners recommend testing homeless patients more frequently because of their higher risk for contact with active TB and unpredictable follow-up. For high-risk patients with a negative test result, re-check every six months*; for patients who test positive, do a baseline chest x-ray and symptom screen every six months. TB specialists recommend regular tuberculin testing even for patients with CD4

counts <200, who may not be as reactive to the test due to immunosuppression. For persons with TB symptoms or a history of exposure to tuberculosis, a chest x-ray is recommended, regardless of the skin test reaction. Realize that a negative chest X-ray does not rule out active tuberculosis, including non-pulmonary TB, in an HIV-positive patient.

Tuberculosis surveillance techniques may vary according to TB prevalence in the community. *Collaborate with your local health department for TB surveillance, screening and referrals, to help decrease barriers to care for homeless patients*. Various agencies (including shelters) require proof of TB testing. It is not unusual for a homeless person to have been tested multiple times for TB by different providers. *Help the patient maintain a "medical home"* where documentation of services is retained. *Provide a written record of TB testing results on a wallet-sized card that patients can carry with them*.

- **Hepatitis testing** Testing for hepatitis C (HCV) is especially recommended for injection drug users and their partners, and *should be part of initial screening for every HIV-infected person. In patients with risk factors, screen annually to detect new seroconversion*. Hepatitis C negatively affects the course of HIV disease, and vice versa (Backus et al., 2005; Thompson et al., 2005; Nyamathi et al., 2002). Many HIV-positive patients have a low response to hepatitis B vaccine (Ramirez et al., 1990). *Test for immune response* (HBsAb, HBsAg) *after vaccination; consider double dose of vaccine if there are no immune titers*. A minority of patients may have occult hepatitis B (where hepatitis B core antibody [anti-HBc] is positive and HBsAg is negative). *Consider hepatitis B virus (HBV) DNA testing of patients with unexplained increased liver enzymes* (Highleyman, 2007). Test for immunity and vaccinate for hepatitis A accordingly.
- **Cancer/STI screening** HIV-positive women should have a complete gynecologic evaluation including a *cervical Papanicolaou (Pap) smear*, which also tests for *Human papillomavirus (HPV)*. Gynecologic examination should occur as part of the initial HIV evaluation and upon entry to prenatal care. A repeat Pap smear should be performed 6 months later. If both smears are negative, annual screening is recommended thereafter in asymptomatic women. Screening every 6 months is recommended for women with symptomatic HIV infection, prior abnormal Pap smears, or evidence of HPV infection. HPV vaccination should be offered to all females between the ages of 9 and 26 (CDC, Workowski, & Berman, 2006). In addition, *GC/chlamydia and RPR/VDRL* screening should be done annually in all HIV-infected persons. Although there are currently no national recommendations of routine screening for anal cancer, (refer to footnote 3 in the original guideline document) some specialists recommend anal cytologic screening for HIV-seropositive men and women due to their higher risk for cancer. *Consider anal Pap tests along with tests for rectal Neisseria gonorrhoeae and Chlamydia trachomatis infection at baseline and annually in the following populations: men who have sex with men and any patient with a history of anogenital condylomata*.
- **Pregnancy test** Offer pregnancy testing (urinary chorionic gonadotropin *[UCG] urine test*) to sexually active female patients of childbearing age.

Plan and Management

Plan of Care

- **Next steps** Explain the need to *develop an agreed-upon plan of care with the patient's active involvement. Emphasize next steps* the patient should expect, while *reassuring him/her that everything need not be done right away*.
- **Interdisciplinary team** Establish an interdisciplinary clinical team managed by the patient, *including addiction/mental health counselors, a medical care manager*, and a *treatment advocate*. *Every member of the clinical team should engage in care planning and coordination and patient education about HIV*. A team approach increases the likelihood that the patient will develop strong rapport with at least one caregiver.
- **Basic needs** Understand that HIV usually will not be the most important problem for a homeless patient unless s/he is acutely ill; food, clothing, housing, and mental health issues may be perceived as more important. *Develop an individualized plan of care with the patient that incorporates strategies to meet basic needs*. This will strengthen the therapeutic relationship, increase patient stability, and promote successful treatment.
- **Patient priorities and goals** *Carefully assess the patient's immediate and long-term needs and what the patient identifies as priorities*. Ask what s/he would like you to do. *Address immediate medical needs first (the patient's reason for the visit) rather than underlying causes*. (For example, provide cough medicine, pain relief, or hormones, where indicated, even if you don't think they are medical priorities.) The patient will be more receptive to discussion of underlying causes if immediate needs are met. Encourage the patient to specify his/her own goals and prioritize issues to be addressed. Meeting small, manageable objectives and keeping follow-up appointments are evidence of the patient's willingness and capacity to adhere to treatment.
- **Governmental assistance** Help the patient apply for Ryan White Comprehensive AIDS Resources Emergency (CARE) Act services including the state AIDS Drug Assistance Program (ADAP), Housing Opportunities for Persons with AIDS (HOPWA), disability assistance (Supplemental Security Income/Social Security Disability Insurance [SSI/SSDI]), Medicaid, Food Stamps, and any other programs that facilitate access to health and social services.
- **Communication** *Frequent discussion, explanation in simple language, and feedback regarding the patient's understanding of the plan of care are critical to adherence*. Recognize that patient forgetfulness may be a symptom of cognitive impairment secondary to HIV, medication side effects, or comorbidities. *Do not criticize the patient; speak in a straightforward and nonjudgmental manner*. Avoid medical jargon and euphemisms, which can be confusing and perceived as "talking down" to the patient (e.g., with an adolescent, talk about "having sex," not "intercourse"). *Use an interpreter and/or lay educator* (promotoras) *to facilitate communication and assure culturally competent care for patients with limited English proficiency*.

Education, Self-Management

- **Basic education about HIV** Learning about HIV and how to control it can help homeless patients regain a sense of control over their lives and provide an impetus for change and incentive to work on other issues (e.g., begin drug treatment, reunite with family). Begin at the first visit and provide ongoing education, support and reinforcement at each subsequent visit. Provide

answers to basic questions about HIV: What is the virus? What is it doing to your body? Why do you need medication? Educate patients about the natural course of the disease. Provide printed information in language they can understand. *Teach homeless patients how to know if they are sick, how to tell if the illness is more serious than a cold, how to care for themselves when sick, and when to seek urgent or emergent care*. Educate them about warning signs of HIV complications (fevers, coughs that won't go away, exhaustion) and what you can do to help alleviate these symptoms. *Tell patients where they can go to get medicine and where they can go to recuperate when ill*. Explain that the more advanced their disease is, the more preventive medications will be required to keep them from getting sicker.

- **HIV transmission** Explain that the HIV virus can be passed through injection drug use (IDU), sexually, perinatally, and via breast milk from an HIV-positive mother to her baby. *Review safe sexual practices*, including limiting the numbers of sexual partners; *facilitate access to condoms* (other contraceptive methods do not prevent HIV transmission). Stress the need for protection even after beginning ART. Counsel HIV-infected pregnant women about how to reduce the risk of transmitting HIV infection to their babies. *Stress the importance of antiretroviral prophylaxis to reduce perinatal transmission of infection*. Refer them to high risk obstetric care, where HIV expertise and support are available. Refer for expert postnatal care for the child. Breastfeeding is not recommended for HIV-positive mothers if there is a safe and feasible alternative—that is, if infant formula is available, if there is access to clean water to prepare formula milk and cleanse bottles and nipples, if refrigeration is available to store prepared formula, and if the mother can manage formula feeding with appropriate hygiene (DHHS, "Guidelines for the use of antiretroviral agents in pediatric HIV infection," 2008; World Health Organization [WHO], 2007). *Mothers should either formula feed or exclusively breastfeed; HIV transmission rates are higher in those who alternate between the two* (WHO, 2007) (refer to footnote #4 in the original guideline document).
- **Prevention** Discuss ways to reduce HIV risks for the patient and others. For injection drug users, *stress the importance of self-administered injections; urge users to cease sharing drug paraphernalia and to participate in a needle exchange program. Promote behavioral change through individual, small group, and community interventions based on careful investigation of actual patient behaviors* (how they spend their time, what activities interest them) *and potential structural barriers to desired change*.

  Use *motivational interviewing, risk reduction techniques*, and *social skills training*. Reinforce information about risk reduction with interactive activities that involve *repetition, positive feedback*, and *acting out new skills*, such as proper condom use and role playing (how to talk to a partner). (HCH Clinicians' Network, 2000; Susser et al., 1998) (refer to footnote #5 in the original guideline for definition and other references concerning motivational interviewing).

- **Addiction management** For HIV-infected persons with a history of drug use, tailored HIV care, including antiretroviral therapy (ART), is often highly successful. Some drug users have stable routines and can integrate treatment into their daily life; others may need intense case management, harm reduction techniques and/or outreach strategies to facilitate engagement in

care. The most effective programs offering ART to injection drug users have strong links to community-based organizations and utilize peer educators and counselors. *Identify the patient's need; treat comorbidities, and prescribe OI prophylaxis if the patient is not ready for ART. Recognize that there are significant interactions between drugs of abuse and antiretroviral medications*. (For a current list of drug interactions, see Urbina et al., 2008.)

- **HIV therapy** *Inquire about the patient's understanding of HIV therapy*. Some patients refuse treatment because they don't understand it, have lost hope, and don't think treatment will matter. Emphasize the positive; *assure HIV-infected homeless patients that they are candidates for treatment and can manage it successfully*. ART can be as effective for highly motivated persons who are homeless as for those who are housed, as confirmed by comparative measurement of viral loads following treatment (refer to footnote #6 in the original guideline document). *Explain what CD4 counts and viral loads are, and how these measurements are used* to help determine how advanced the patient's disease is, predict risk of complications, and monitor treatment adherence. Explain that HIV-infected persons can live well for many years if treatment regimens are followed with regular medical monitoring.
- **Written instructions/reminders** After assessing for literacy, *write down instructions about when to take medications each day* (at what times). *Use graphic illustrations* and color coding to clarify and reinforce verbal instructions; *then make sure that instructions are understood*. Ask the patient, "What medications are you going to take this morning and how?" Instruct the patient to "keep written instructions with you." If a patient discloses that s/he has trouble reading, designate someone on the clinical team who can spend extra time to help him/her understand instructions, *and offer referral to a literacy program or instruction in English as a second language (ESL)*. *Specify any dietary restrictions* associated with antiretroviral therapy or other treatment (whether medications must be taken with food or on an empty stomach). It is sometimes possible to *enlist the help of shelter staff in reminding patients to take medications*.
- **Drug resistance** *Explain the risk of developing resistance to HIV medications if they are not taken consistently or appropriately*. Acknowledge that for all persons taking ART, as for persons receiving treatment for TB, development and spread of drug-resistant infection is a serious concern; but stress that lack of treatment is no more acceptable an alternative for HIV than it is for TB.
- **Treatment advocates** *Use social workers, nurses, or case managers as treatment advocates, serving as liaisons between the patient and providers to promote successful adherence to HIV therapy*. The patient may feel more comfortable discussing side effects of treatment with social workers or other advocates who have more time to explain than medical providers. Treatment advocates should be part of an integrated clinical team and treated as peers by medical providers. Consider using consumer advocates (formerly homeless persons) to accompany homeless HIV patients to appointments with specialists and attend clinic sessions with the patient and primary caregivers. This can help them overcome communication barriers sometimes experienced in encounters with mainstream health care providers. Use of consumer advocates to explain information conveyed by the medical provider to other consumers is often helpful, but must be done with sensitivity to patient privacy and confidentiality and in compliance with requirements of the Health Insurance Portability and Accountability Act (HIPAA). (For information about

HIPAA privacy requirements, see www.hhs.gov/ocr/privacy/hipaa/understanding/index.html.)

- **Directly observed therapy** Good results have been reported with directly observed therapy (DOT) when homeless patients come to the clinic once daily to take medications (Mitty et al., 2003). *DOT is recommended for patients with co-occurring tuberculosis, substance use disorders, and/or mental illness*, but can present staffing and transportation challenges when patients must take medications 2 to 3 times per day. *Provide transportation assistance to assure feasibility of this treatment option*. Some communities are exploring the possibility of directly observed HIV therapy at methadone clinics. Although some patients may benefit from an adherence program that provides medication storage and directly observed therapy, others are quite capable of managing medications on their own (e.g., schizophrenic clients can adhere well to treatment regimens and other routines.)
- **Side effects management** Recognize that medication side effects are one important reason for lack of adherence to ART. *Be candid about possible side effects of antiretroviral treatment*, such as diarrhea, so the patient knows what to expect and can identify and better describe side effects that do occur. *Ask what side effects the patient has noticed; if there is no medical alternative with fewer/less severe side effects, explore strategies to minimize and/or accommodate them within the patient's lifestyle*. Provide snacks (e.g., peanut butter crackers, individual boxes of cereal and milk with extended shelf life, individual containers of juice, granola bars, high energy bars) to help the patient avoid side effects and promote adherence to treatment. Many methadone centers will dose adjust when a client is starting ART and experiences a decrease in methadone efficacy. Address medical comorbidities with the most tolerable regimen. For example, a person with a history of bipolar disorder should not be prescribed a regimen containing efavirenz, which may precipitate worsening of mental health conditions; a patient with a history of irritable bowel syndrome or hyperlipidemia should avoid lopinavir/ritonavir, which may exacerbate these conditions.
- **Urgent medical problems** Help patients understand the difference between common medication side effects and symptoms of life-threatening toxicities. *Specify symptoms of hypersensitivity* to all medications in the suggested plan. *Stress the need for prompt evaluation if the following symptoms occur: fever, new rash, difficulty breathing, abdominal or back pain, vomiting, headache, vision changes*. Tell the patient not to wait until the next appointment *if feeling ill*; go to a drop-in clinic or the emergency room.
- **Supportive relationships** Reluctance to inform others about their illness results in lack of supportive feedback for individuals with HIV. *Encourage a supportive relationship with a social worker, provider, or friend — someone in whom the patient can confide fears, questions and concerns*, including problems with medication side effects. Advise the patient, "If your health care provider doesn't have time to listen and discuss your concerns, find someone who does." *Link the patient with a support person or "sponsor" through HIV/substance abuse treatment programs or other community-based programs*. Network with law schools and community groups to provide *pro bono* legal assistance with child custody, drug arrest, or immigration issues as part of substance use treatment programs. Create a support group where patients experiencing extreme stigmatization or isolation can share concerns and learn how others are coping with their disease. Members of ethnic/sexual minorities and migrant workers may experience more marginalization and isolation than other homeless individuals with HIV. Help such patients find

each other for mutual support. *Offer social support groups in addition to groups for therapy or counseling. Help patients moving into transitional housing learn how to live successfully in a community setting* (e.g., respect personal boundaries).

- **Nutrition counseling** *Educate patients about nutritional health, diet, and dietary supplements*. If possible, *include a nutritionist familiar with the issues of homelessness on the interdisciplinary health team* to do screening and frequent consultation. Consider the use of bioelectrical impedance analysis (BIA), which can detect improved body cell mass in patients with AIDS wasting syndrome, to educate patients about their nutritional status and promote early detection and management of HIV-associated nutritional changes (Klauke et al., 2005; Swanson & Keithley, 1998). *Prescribe multivitamins with minerals*. Assure that pregnant patients receive appropriate vitamin supplements (with folate). *Prescribe nutritional supplements with less familiar brand names and lower resale value to reduce risk of theft*.
- **Medical home** *Discuss benefits of forming relationships with care providers who can help the patient avoid becoming acutely ill*. *Explain what primary care is and how to use a regular source of care* ("medical home"). Many homeless people have never had a regular medical provider and only receive medical care episodically from hospital emergency room staff. Present regular primary care as an opportunity to be in charge of one's own health. Many medical problems, including those related to HIV, are preventable.
- **Education of service providers** *Educate all homeless service providers about HIV, including prevention measures and the need for nonjudgmental, compassionate care*. Provide basic education about the natural history of the disease, what to expect if the patient is or is not treated, transmissibility of infection, and standard precautions. Educate medical providers about the special needs of homeless patients. *Explain how treatment adherence and successful outcomes are possible even for homeless individuals with mental health/substance use problems*. Stress the importance of developing a nonjudgmental, therapeutic relationship based on unconditional acceptance of the patient and harm reduction. Help specialists understand that homeless people may not be able to follow the treatment plan they prescribe and how to modify the plan of care so homeless patients can better adhere. *Educate primary care providers about chronic pain management and addiction medicine. Understand your own feelings about substance use, sex work, and mental illness*. Take time in a safe setting *to explore your feelings about people who are homeless. Talk about your experience, biases, and stereotypes with other providers who are more experienced in caring for homeless patients*. Help pastors learn how to talk about HIV with members of their faith community. Work with food services at shelters and soup kitchens to provide appropriate meals.

Medications

- **Medical priorities** With all HIV-infected patients, *weigh benefits against potential risks of early antiretroviral treatment. If acute retroviral syndrome is not suspected or if ART is not of clear benefit (i.e., CD4 cell count >350 cells/mL), address other medical priorities first*: psychotropic therapy for severe mental illness, substance abuse treatment/therapy (methadone for heroin addiction), prophylaxis for opportunistic infections and tuberculosis (if

tuberculin test is positive), treatment and management of uncontrolled hypertension, diabetes, and seizures—any of which can undermine a patient's ability to adhere to HIV treatment.

- **Prophylaxis** Start prophylaxis for opportunistic infections (OIs) as soon as indicated by standard clinical guidelines (DHHS, Guidelines for the use of antiretroviral agents in HIV-1-infected adults and adolescents. 2008). *Explain the importance of OI prophylaxis at each visit, if the patient is not initially interested or willing to accept preventive treatment*. Taking medication regularly for OI prophylaxis can be an indicator of readiness for ART.
- **Immunizations** Lacking reliable food and shelter, most homeless people welcome immunizations as a way to prevent illness. Given their high risk for exposure to respiratory infections in congregate living situations, all homeless patients should receive *influenza* vaccine annually and be immunized against *pneumococcus* according to standard clinical guidelines. Also provide *hepatitis A and B* vaccines. Offer *Tetanus, Diphtheria, Pertussis (Tdap)* vaccine to patients aged 19–64 if the last immunization was more than 10 years ago and to all patients under age 65 who have not been vaccinated before. Provide *pneumococcal polysaccharide vaccine (PPV)* to all HIV-infected persons as close to HIV diagnosis as possible and every 5 years thereafter. (Quick Reference Vaccines Chart at: http://www.cdc.gov/vaccines/vpd-vac/vaccines-list.htm.)
- **HIV treatment readiness** Never rush to antiretroviral treatment; *build a therapeutic relationship first. Encourage more frequent visits to prepare homeless or formerly homeless patients for treatment*. Evaluate readiness for treatment and ability to adhere to a plan of care by first attempting to understand the patient's current behavior in light of his or her life story. Elicit this information in a nonjudgmental way; *understand the patient's lifestyle and how basic needs are met*. If s/he desires treatment, *look for evidence of a daily routine to discover how to prescribe medications that can fit into that routine*. Outreach provides an opportunity to observe patients in their own environment and assess stability, evidence of regularity, and capacity to follow a schedule (sleep pattern, access to food/water/clock, daily activities, regular appointments, etc.), in order to evaluate their readiness for ART.

  A patient who must leave the shelter at 5:00 a.m. may not be able to take medications at that time. Ask what s/he does after leaving the shelter (e.g., go to a drop-in center or the library? have breakfast?). Ask if there is a "private time" when s/he can take medications. Privacy is frequently an issue for homeless individuals, who worry about taking medications that have street value or which might reveal their diagnosis. (If others discover they have HIV, they may be shunned or at increased risk for abuse.) Ask the patient, "Who can help you take your medicines and keep track of them?" *For best outcomes, engage patients and assure that they have a comfortable "medical home" before beginning treatment. Address issues that may complicate treatment adherence, including mental illness and substance use*. The patient should be part of the team that helps to decide when to begin treatment.

- **"Practice" medications** For a patient desiring HIV therapy whose ability to adhere to treatment is questionable, *consider using placebos or vitamins as "practice medications"* for a week or two. Put medications of the same size and number to be prescribed for HIV in a pillbox; follow up in a week. Ask the patient how many pills were taken, how many missed. This may convince the

patient that s/he is not yet ready for HIV therapy (e.g., needs to work on substance abuse issues first). *Use of this technique is not recommended for patients with advanced disease* (i.e., CD4 <200 or OI) as it may unnecessarily delay urgently needed treatment. While use of "practice" medications may be appropriate for some patients, it should not be routinely used. Many studies of HIV-infected homeless people, including active substance abusers, demonstrate that most are able to adhere well to ART. Moreover, the use of practice medications is perceived as patronizing by many patients.

- **Antiretroviral medications** *Be knowledgeable about HIV treatment regimens and when guidelines recommend initiation of treatment, as well as recommendations for managing treatment failure* (refer to footnote 7 in the original guideline). Working on prophylaxis, immunizations, obtaining housing, and access to other health and social services before initiating HIV therapy can strengthen the therapeutic relationship, help the provider decide on the best medical regimen, and result in more successful treatment. If the patient has advanced disease and a very low CD4 count, however, delaying ART can increase risk of mortality. Although housing can improve adherence to treatment, it is important to realize that Section 8 housing can take 6–12 months or longer to obtain. A person with advanced disease could easily die of an OI in that period of time. *Individualize initiation of HIV therapy and continually reassess treatment adherence and effectiveness. Ensure access to medications that can be taken once or twice daily*.
- **HIV specialist** HIV is a primary care disease that requires special knowledge to treat. *Partner with an HIV specialist* (a certified clinician who follows at least 26 to 50 HIV patients every six months and pursues continuing education) *in prescribing treatment through consultation or referral; or consider becoming a HIV specialist yourself*. The team approach to care for homeless individuals is optimal; an HIV specialist, primary care provider, case manager, nutritionist, mental health professional, and outreach worker should all be part of the team. A primary care provider serving a community with a fairly high incidence/prevalence of HIV should develop HIV treatment skills. In the clinic setting with five or fewer patients known to be living with HIV infection, a referral source should be established for specialty treatment. In the clinic setting with more than five patients living with HIV, the provider(s) should consider participating in continuing education specifically directed toward developing expertise in the treatment of HIV/AIDS. Consult with an infectious disease specialist and other specialists in planning medications for patients with comorbidities. Consultation is a two-way street; specialists may consult primary care providers with expertise in serving homeless patients.
- **Simple regimen** *Prescribe the simplest, most effective medical regimen possible. Don't undertreat HIV or opportunistic infections just because a patient is homeless*. Pill count, frequency, and dosing are extremely important for homeless patients; *once-a-day dosing is preferable if clinically indicated*, especially for those who may be unable to adhere to a more complex regimen.

ART: Several antiretroviral drugs are available in formulations that permit once daily dosing (see DHHS, "Guidelines for the use of antiretroviral agents in HIV-1-infected adults and adolescents," 2008). Dispensing medications a day or a week at a time will help some patients, if transportation to and from the clinic is available and affordable. (If possible, provide transportation or

carfare for homeless patients.) Overcome the common perception that antiretroviral medications are too complicated.

OI prophylaxis: If prescribing trimethoprim/sulfamethoxazole double-strength (TMP/SMX DS) for pneumocystis prophylaxis (PCP), one dose per day is best and probably easiest for most homeless patients, but 3 times per week is acceptable. (Alternatively, use once weekly dosing with dapsone/pyrimethamine/leucovorin for PCP, and with azithromycin for *Mycobacterium avium* complex (MAC) if CD4 <100). For some patients, remembering to take the medication every morning is easier than remembering to take it weekly or 3 times per week. It's better to take some medication for OIs than none. *The opposite is true for ART: it's better not to take antiretroviral medications at all than to take them only some of the time*.

- **Dietary restrictions** Find out if the prescribed regimen has any dietary restrictions. *Inquire about the patient's access to regular meals*. Some HIV medications must be taken with food; other medications must be taken on an empty stomach. *If possible, prescribe medications without dietary restrictions*.
- **Side effects** Prescribe medications with fewer/less severe gastrointestinal (GI) and other side effects. (Some NNRTIs and protease inhibitors have fewer gastrointestinal side effects.) The severity of side effects experienced by the patient may not be apparent to the provider. Diarrhea creates an added burden for a homeless person with limited access to toilets and bathing facilities. Address the likelihood of diarrhea with certain protease inhibitors and provide anti-diarrhea medication for patients with symptoms. Nausea, which often results from taking medications on an empty stomach, may also be incapacitating; providing nutritious snacks can prevent this side effect. *Be more aggressive with homeless patients in treating side effects or changing medication, if an equally effective alternative is available*.
- **Drug toxicities** *Be aware of serious toxicities that can occur with ART*. *Screen for HLA-B5701 before prescribing abacavir*; although rare, a negative result does not absolutely rule out the possibility of hypersensitivity. *Review symptoms of hypersensitivity with the patient*.
- **Drug interactions/contraindications** Chronic illness may complicate HIV treatment because of the potential for drug-drug interactions. Awareness of drug interactions is important when prescribing HIV medications. Some medications may be contraindicated if the patient has history of pancreatitis or alcoholism, or should be used with caution and more frequent monitoring with co-occurring mental illness, hepatitis C, high cholesterol, or diabetes. Some HIV medications and HIV itself may cause metabolic changes, which can include diabetes, hyperlipidemia, changes in body fat distribution, osteoporosis, and lactic acidosis. ART can also exacerbate pre-existing diabetes. *Carefully monitor all patients on ART for the development of glucose intolerance and diabetes, as well as for lipid abnormalities and lipodystrophy*; treat according to accepted standards of care (DHHS, "Guidelines for the use of antiretroviral agents in HIV-1-infected adults and adolescents," 2008).

Methadone Evaluate use of methadone by patients on ART. *Be aware that non-nucleoside reverse transcriptase inhibitors* (NNRTIs) *and certain protease inhibitors can reduce the efficacy of methadone by as much as 50%. If a protease inhibitor is indicated, use ritonavir boosting*. If this is not feasible for

a patient on methadone, it is essential *to work directly with the patient's methadone maintenance treatment program to adjust the dosage upward*. (Many practitioners begin with a 20% increase in methadone dosage when ART is initiated). *Recognize that successful adherence to methadone therapy for persons addicted to heroin can increase adherence to ART* (Clarke, 2003). Some patients won't begin HIV treatment or may stop taking medications because of the misconception that all prescription drugs are incompatible with alcohol or other drug use.

Other analgesics Recognize that HIV and hepatitis C are painful diseases, and that other comorbidities commonly seen in homeless patients, including traumatic injuries, can result in chronic pain. *Recognize that some HIV medications can decrease or increase the efficacy of pain medications*, including methadone and other narcotics. *Work with the patient to understand the underlying cause of pain; prescribe appropriate pain medication and document why you prescribe it. Understand chronic pain management*; if you don't, the patient may seek relief from practitioners known to provide pain medications indiscriminately, without understanding HIV care or monitoring for possible misuse. If necessary, refer to a pain management specialist; maintain open communications with the patient and other providers. *To avoid overmedicating or contributing to drug-seeking behavior, encourage cooperation with a contract that specifies the plan of care and designates a single provider for pain prescription refills*.

- **HIV treatment and substance use** Recognize that alcohol and drug use is common among homeless people and *prescribe medications that are compatible with substances used*. Most antiretroviral medications are chemically compatible with commonly used street drugs, although use of psychoactive substances, including prescribed psychotropic medications, can interfere with remembering to take medications. Address these issues candidly with the patient in order to promote adherence. An automatic assumption that people with substance use disorders cannot adhere to HIV treatment is inappropriate. The primary challenge is determining when to initiate therapy. Homeless individuals with substance use disorders can learn how to organize their lives so they can keep appointments and take medications while actively using psychoactive substances. Indicators of readiness include keeping regularly scheduled appointments with medical and ancillary staff. *If HIV therapy is desired and there is evidence that the patient can adhere to a regular schedule despite substance use, advise taking HIV medications before using other drugs*.

  If appointments are missed, seek the patient out and explore in a nonjudgmental manner what has changed in his or her life to motivate a change in behavior (common triggers of relapse: contact with/rejection by a family member, anniversary of a painful event). *Look for indications of new stresses and difficulty coping; help the patient find ways to cope*. Most important, *maintain communication with the patient*. Many actively using, chronically homeless people have successful treatment outcomes. Knowing that medications can prolong life can give them hope and motivate lifestyle changes to promote health. Successful HIV treatment is not only possible, but extremely desirable for homeless people with chemical dependencies.

- **Drug resistance** Resistant virus in antiretroviral-naïve HIV-infected patients can be as high as 16%, depending on the geographical area. Drug resistant mutations may be below the sensitivity level of the HIV test and become evident only in response to specific medications. *Use genotype testing to increase the possibility of choosing a successful therapy. Individualize therapy*. *Balance possible side effects with simplicity and low resistance barrier with tolerability*. *If the patient requests HIV therapy, is willing to begin treatment and is medically appropriate for treatment, select an initial regimen to which s/he can adhere, preferring medications with a low pill burden where possible*. Homeless individuals should have the same access to HIV medications as others.
- **Adherence monitoring** *At every visit, ask how many doses of each medication the patient missed over the last week or month. Explore and address any barriers to adherence. Problem solve with the patient. If forgetting doses is the problem, use pill boxes, watch alarms, or other methods to help him or her remember to take medications*. Address adherence routinely so that problems are identified before the patient develops resistance and fails the treatment regimen. (CD4 decrease or viral load rebound is sign of treatment failure and a very late stage marker of adherence.) *Measure CD4 counts and viral load every 3 months; if the patient's viral load increases and the CD4 count decreases, find out why and address the reasons*. (Reduced treatment adherence is often triggered by depression or a relapse in recovery.) *To facilitate adherence, use a harm reduction approach, outreach, intensive case management, directly observed therapy, and medication monitoring*. *Provide incentives* and don't require clients to be drug and alcohol free to receive them. Aggressive outreach and case management will contribute to successful outcomes for active substance users. Some patients with advanced disease and/or multi-drug resistance will benefit from treatment and a reduced risk of transmission even if viral loads are not entirely suppressed.

  Pill packs Consider providing "blister packs" for all medications, labeled for each day of the week, each meal per day. Some pharmacies provide pre-packaged pill boxes with handles or "easy packs" — a cellophane roll with perforated sections that enable patients to tear off morning and evening doses and carry them in a pocket or bag. This helps patients with memory loss keep track of their medications and makes resale more difficult. Some people prefer using their own system to remember what pills to take when.

  Reminders Consider the use of electronic reminder devices such as beepers, pagers, cell phones, wristwatch alarms, and pillbox alarms programmed to prompt patients to self-administer their medications as prescribed. Homelessness does not preclude HIV/AIDS patients from having access to electronic devices, which can prove useful in promoting treatment adherence and clinical follow-up, with the added advantage of being mobile, discrete, and easily integrated into their daily routines (Wise & Operario, 2008; Hsu, 2008; Bamberger et al., 2000).

- **Medication storage** *Allow homeless patients to store medications at the clinic and come there daily for treatment*. This protects against having medications stolen or confiscated by police if arrested for public nuisance offenses and assures that they are taken as prescribed. *If medications are not*

stored in the clinic and the patient does not have access to refrigeration, avoid prescribing medications that require it (e.g., ritonavir). Shelter residents may be required to turn in all medications to shelter staff, who sometimes lose/misplace them or fail to return medications to the patient when needed. Lack of privacy/confidentiality is a major problem for shelter residents, who may be reluctant to complain to shelter staff for fear of disclosing their diagnosis and too embarrassed to tell the provider if medications are lost repeatedly. *Urge shelter staff to make stored medications easily available to patients*; explain that medications are costly and necessary for the patients' health.

- **Access to medication** The availability of free or low-cost HIV medications may be limited, particularly in smaller communities and rural areas. For homeless patients, even a small co-payment can be excessive, and for those without health insurance or access to programs that provide free medications, the cost of antiretroviral therapy may be prohibitive. *Assure continuous access to medications before initiating treatment*. In some cities, homeless patients are referred to one clinic or pharmacy to prevent misuse of medications. Lack of transportation to the pharmacy can present barriers to getting prescriptions filled. Since homeless people do not have regular access to telephones, coordinating delivery of medications to these patients can be difficult. *Provide transportation to pick up medications or arrange for delivery of medications to a location where the patient can obtain them reliably and wants to receive them* (e.g., a friend's home, social work center or clinic). Delivery of medications to a clinic for pick up and distribution can provide another opportunity for hands-on education about treatment adherence.

Associated Problems, Complications

- **Medication side effects** Side effects of antiretroviral therapy are a primary reason for nonadherence. *Recognize that medications which interfere with survival on the streets by making people feel sicker or more fatigued will not be acceptable to homeless patients*. Common side effects of ART include diarrhea (particularly from some protease inhibitors), nausea (if taken on an empty stomach), peripheral neuropathy (numbness/tingling in extremities, exacerbated by poor nutrition and constant walking), and nightmares. Living in a shelter or on the streets is especially difficult for patients with these symptoms, which are exacerbated by chronic sleep deprivation and depression. *If alternative medications with fewer negative side effects are not medically indicated, treat side effects symptomatically*. Some clinicians recommend the medical use of marijuana to help control pain and nausea, and to reduce alcohol or other drug use. Some medications increase sensitivity to sun exposure (e.g., TMP– SMX DS, commonly prescribed for PCP prophylaxis). Advise homeless patients who spend most of their time outdoors to wear long sleeves and sunscreen to avoid sunburn. *Be more aggressive in treating side effects or changing medication for homeless patients, if an equally effective alternative is available*.
- **Severe drug toxicities** Some adverse effects of antiretroviral agents can be fatal if the drugs associated with them are continued. Medication hypersensitivity reaction, hepatic necrosis, Stevens Johnson Syndrome, pancreatitis, and lactic acidosis are among the drug reactions that should be considered medical emergencies. *Be aware of life-threatening complications*

of ART and how to manage adverse effects (see DHHS, "Guidelines for the use of antiretroviral agents in HIV-1-infected adults and adolescents," 2008).

- **More acute illness** Because homeless people with HIV may not seek care until their disease is advanced and symptomatic, they often present with more acute illness. Even in areas with free access to exceptional HIV care, new patients with advanced AIDS are not unusual, and many of them are homeless. Patients with advanced disease require complicated treatment regimens. Opportunistic infections and diseases unrelated to HIV may increase the severity of illness. Major complications of HIV include late-stage opportunistic infections such as *Pneumocystis carinii* pneumonia (PCP), invasive candidal infection, toxoplasmosis, *and cryptococcal meningitis, and CMV retinitis (which can lead to blindness if untreated). Provide or refer homeless patients to a respite care facility where they can convalesce when ill/following hospitalization or receive end-of-life care*. Develop close linkages with inpatient service providers and facilities.
- **Co-occurring mental illness & substance use** Mental illness, substance use, and HIV are frequently linked. Many people with mental illness use psychoactive substances that result in loss of inhibition and can result in unsafe behaviors which increase their risk of exposure to HIV, tuberculosis, and hepatitis. Mental illness (both Axis I and Axis II disorders) and drug-induced psychosis can interfere with treatment adherence. Optimally, *treat co-occurring mental illness and substance abuse/dependence simultaneously within the same program*. Underlying mental illness is often the issue that keeps homeless patients out of care; or if in care, may be their most pronounced disorder (Weiser et al., 2006). *Involve a psychiatrist who is interested in the co-occurrence of these disorders with HIV in the assessment and management of homeless patients*. A key issue is pharmacodynamics (the cumulative side effects of polypharmacy). In practice, overlapping side effects are more problematic than drug-drug interactions. Some mental health problems can be treated by a primary care provider. *Refer more complicated cases to a dedicated mental health program while maintaining good coordination of mental health and primary care. Use caution in prescribing a regimen containing efavirenz for patients with serious depression, bipolar disorder, or schizophrenia*.
- **Cognitive impairment** *If patients have difficulty remembering appointments, don't automatically assume nonadherence; question their cognition*. Cognitive impairment may be associated with mental illness, chronic substance abuse, AIDS-related dementia, and/or opportunistic infections. Accurate diagnosis may require specialty evaluation.
- **Hepatitis** HIV and hepatitis B or C (HBV, HCV) are chronic, potentially fatal diseases that can be symbiotic. Treatment of these liver diseases in patients with co-occurring HIV is important. Persons engaging in IDU are at increased risk for HCV and HBV. Morbidity and mortality risks for HIV infected homeless people are amplified by limited access to HCV diagnostic testing and restrictive eligibility criteria for treatment. *Be aware of the association between antiretroviral drugs and hepatotoxicity; carefully monitor liver enzymes during ART*. Abrupt cessation of antiretroviral medications that also treat hepatitis B can cause a flare in liver enzymes. Although referral of HIV-infected patients with hepatitis to a hepatologist is the standard of care, lack of access to specialists experienced in the treatment of comorbid HIV and hepatitis has prompted some HIV clinics to provide hepatitis B and C treatment. If access to a specialist is a problem, initial evaluation should include: hepatitis C viral load (RNA quantitative assay), hepatitis C genotype

to identify subtype and likelihood of response to treatment, Alpha-fetoprotein (AFP), and liver tests including gamma-glutamyl transpeptidase (GGT), CBC, metabolic panel, and right upper quadrant ultrasound (RUQ U/S) to evaluate for hepatoma/hepatocellular carcinoma (HCC)/cirrhosis. Nursing and psychosocial support are essential in order to assess each patient's response to treatment (Clanon, Mueller, & Harank, 2005). *For better treatment outcomes, facilitate access to supportive housing and behavioral health care*.

To reduce risks of treatment-related depression, *seek a psychiatric consultation prior to initiating HCV therapy, especially for patients with a known history of suicidal ideation or attempt. For patients with co-occurring alcoholism, use behavioral contracts or other strategies concurrently with HCV treatment to promote sobriety and reduce risk of liver damage. When initiating ART in a patient with HIV/HBV coinfection, consider including lamivudine and tenofovir* — two antiretroviral agents that are active against HBV — as part of a fully suppressive antiretroviral regimen. In general, treatment of these patients requires careful follow-up and consultation with a specialist, as they may be more likely to develop drug-related liver complications. *Ensure that all patients are immunized against HBV, especially injection drug users; and immunize seronegative patients against hepatitis A (HAV)*. Recognize that the cost of HBV/HAV vaccines and HCV/HBV treatment may be prohibitive for uninsured patients.

- **Tuberculosis** The association between TB, HIV infection, and homelessness is well document (McElroy et al., 2003; Moss et al., 2000; Taylor, Nolan, & Blumberg, 2007; Zolopa et al., 1994; "Prevention and control of tuberculosis," 1992). Growing numbers of HIV-infected persons have contributed to the resurgence of tuberculosis in the United States, and homeless shelters are among the most likely sites of TB transmission. HIV coinfection increases the risk of progression from latent TB infection to active tuberculosis. Recommended control measures include *more frequent screening of HIV-infected homeless persons for TB infection, initiation of isoniazid prophylaxis for any HIV infected person with a positive tuberculin skin test, and directly observed TB/HIV therapy to promote treatment adherence and reduce the risk of drug resistant organisms* (Moss et al, 2000).
- **Abuse** Homeless individuals with HIV may be at risk for various kinds of abuse from other homeless people and shelter staff who find out they are infected. A significant number of these patients also have a history of physical or sexual abuse that may have precipitated homelessness. *Work with all service providers in clinics and shelters to protect homeless patients from physical assault and verbal abuse*.
- **Pregnancy** *Ensure access to contraception to prevent unwanted pregnancies*. Provide hormonal contraception (medroxyprogesterone acetate every 3 months, patch, or pill) as well as condoms and alternative barrier methods (i.e., female condom, diaphragm if desired). HIV-positive pregnant women should receive ART for themselves and to prevent transmission of infection to the fetus. Many are highly motivated to protect their baby, but women with other children may not agree to treatment that includes residential care. (Family-based treatment centers that permit substance-using mothers to bring one or more children to live with them in a therapeutic residential drug treatment community are disappearing for lack of funding.) *Develop good consulting relationships with obstetricians, including academic departments of*

obstetrics, to help pregnant homeless patients with HIV. Be knowledgeable about national guidelines for the treatment of HIV-infected pregnant women (DHHS, "Guidelines for the use of antiretroviral agents in pediatric HIV infection," 2008). *Work with case managers to facilitate Medicaid enrollment of infants born to HIV-infected mothers so there will be no delay in obtaining zidovudine postnatally*.

- **Lack of transportation** Many poor and homeless people cannot access health services because they lack transportation for trips to and from appointments. This can present serious barriers to HIV testing and care. *Become familiar with transportation resources in your community; community; provide transportation assistance/carfare to facilitate appropriate follow-up care*. All state Medicaid programs are required to provide non-emergency medical transportation (NEMT) to approved health services. Each state is responsible for designing and operating its own NEMT, and programs differ from state to state. (For a list of Medicaid transportation contacts in each state, see: http://web1.ctaa.org/webmodules/webarticles/anmviewer.asp?a=104&z=5)
- **Lack of stable housing** HIV treatment is extremely difficult for individuals without stable housing. Meeting needs for food and shelter leaves little time for medical appointments. Lack of privacy, risk of abuse, theft of medications with street value, and no place to lie down during the day compound discomforts associated with HIV and ART. Homeless persons need a stable residence and routine in order to begin the process of recovery. Stable housing has the potential to reduce HIV risk behaviors, morbidity and mortality (Kidder et al., 2007). Unfortunately, in many communities, housing is simply not available for homeless persons with HIV; in other places, the only way homeless adults unaccompanied by children can get housing is if they are HIV positive. Sometimes the partner of an HIV-infected person who is HIV-negative or untested desperately tries to get infected in order to qualify for housing and other benefits. Individuals with HIV choose to sleep outside to be with a partner, at risk to their own health.

  Strongly advocate for low-barrier subsidized housing in your community for people living on the streets or in shelters, with no pre-requisite to achieve sobriety or attain a level of stability before housing is offered. Despite some availability of transitional housing for HIV-infected individuals in larger metropolitan areas, insufficient housing stock, long waiting lists, and policies that exclude active substance users or ex-inmates limit access for homeless people in many communities. Most housing, rehabilitation, or transitional programs available to homeless persons with HIV infection require sobriety for admission or continued residence. Such supports become attainable only when homeless individuals with co-occurring addiction disorders become too ill to support a habit, often at a time far advanced in the course of HIV infection (O'Connell & Lebow, 1992). The federal Fair Housing Act prevents discrimination based on health history, including mental illness and addiction. Nevertheless, some local communities and permanent housing programs continue to use "housing readiness" as a subjective measure of appropriateness for housing.

- **Financial barriers to HIV care** Efforts to deliver quality health care to homeless individuals with HIV/AIDS are also hampered by barriers to

obtaining public benefits, including health insurance coverage and disability assistance.

Excessive documentation requirements Many states and localities require extensive documentation, including photo identification, birth certificates, Social Security cards, pay stubs, etc., to verify eligibility for entitlement programs such as Medicaid and Supplemental Security Income (SSI), which is linked to Medicaid eligibility in most states. Proof of identity, residence and income is difficult to come by for someone without a home, a car or continuous employment. Obtaining required documentation is often costly, time-consuming, and intimidating. Homeless people may have trouble obtaining transportation to various agencies where required documents are available, or cannot get there during working hours without losing their jobs, or are unable to pay fees required for copies. Even if they are able to get required documentation, homeless individuals may not have a safe place to keep it. Personal papers are often stolen or lost in moving from place to place on foot. *Lack of required documentation to confirm eligibility is the most frequently cited obstacle to Medicaid enrollment for homeless people* (Post, 2001).

Eligibility exclusions It is important to realize that most homeless people (particularly adults unaccompanied by children) do not qualify for public health insurance under current policy; over 70% of clients served by the Health Resources Service Administration (HRSA) Health Care for the Homeless program are uninsured (refer to footnote 8 in the original guideline document). Few state Medicaid programs cover nondisabled adults, and those that do may not cover needed services. For many homeless people, SSI is the only door to Medicaid. SSI regulations still exclude persons with asymptomatic HIV or those with disabling addictions who lack sufficient evidence of co-occurring impairments that meet Federal disability criteria. Only the Centers for Disease Control and Prevention's (CDC's) AIDS-defining diagnoses ("1993 revised classification system," 1992) are considered sufficient evidence of permanent disability, despite the fact that many persons with chronic fatigue and other constitutional symptoms are too incapacitated to engage in gainful employment. Moreover, homeless disability claimants are denied benefits at significantly higher rates than other claimants, often for failure to negotiate the arduous application process and inadequate documentation of impairments by medical providers, rather than for lack of severe medical impairments that meet the Social Security Administration's (SSA) disability criteria. (O'Connell et al., 2007; Post, 2001).

Facilitate applications for disability assistance and SSI-related Medicaid: Keep detailed records of all patients' functional impairments: Develop a working relationship with your local SSA Disability Determination Services office. Secure a representative for homeless patients to help them apply for Federal disability benefits (SSI/SSDI). Ensure that consultative examinations are conducted by physicians with significant experience in treating homeless patients. Advocate for all patients to obtain needed health care, regardless of their insurance status. (For guidance in appropriate documentation of impairments to expedite disability benefits, see O'Connell et al., 2007.)

Seek Ryan White CARE services for patients with no source of coverage or limited coverage for HIV care: The Ryan White HIV/AIDS program (refer to footnote 9 in the original guideline document) is the third largest source of federal funding for HIV/AIDS care in the U.S. after Medicare and Medicaid. Most Ryan White funding is provided to states (55% in FY 2008), followed by cities (29%), with the remainder provided directly to organizations (Henry J. Kaiser Family Foundation, 2008). Some states and localities supplement federal Ryan White funds. Ryan White funding can be used to provide outpatient and ambulatory health services, medications, pharmaceutical assistance, oral health care, early intervention services, health insurance premium and cost sharing assistance for low-income individuals, home health care, medical nutrition therapy, hospice services, home and community based health services, mental health services, substance abuse outpatient care, and medical case management, including treatment adherence services. However, Ryan White is not an entitlement program, and covered services are not guaranteed to all eligible persons; jurisdictions and organizations that receive funding and the level of funding received are determined by HRSA and annual Congressional appropriations.

- **Stigmatization** Strong stigmas against HIV and homelessness, particularly in smaller communities and rural areas, result in extreme marginalization of HIV-positive homeless individuals and reduced self-esteem, often exacerbating self-destructive behaviors (e.g., substance abuse, sex work). Sexual minorities and immigrants with limited English proficiency are especially vulnerable to stigmatization and low self-esteem. Fear of abuse and eviction from shelter motivates many HIV-infected homeless patients to conceal their diagnosis. *Educate shelter staff about HIV/AIDS and explore any concerns they may have. Provide nonjudgmental, compassionate care and offer social support to homeless individuals, especially those with HIV/AIDS*.
- **Incarceration** Many homeless people are frequently arrested or incarcerated for loitering, sleeping, urinating, or drinking in public places—activities that are permissible in the privacy of a home. A number of them contract HIV and hepatitis while in prison. Periods of detention or incarceration can also interrupt continuity of care for pre-existing conditions. *Develop collaborative relationships with correctional facilities to assure appropriate discharge planning and continuity of care following release*.
- **Special populations**

Homeless women The overwhelming majority of homeless patients in most clinic settings are male, which can be intimidating for homeless women, many of whom have a history of physical/sexual abuse. Increasing heterosexual transmission of HIV associated with sexual abuse, sex work, and intravenous drug use warrants programs specifically targeted to homeless women, who can be harder to reach than men and may require more intensive services. *Offer social support and counseling through a weekly women's group. If high-risk sexual behavior is perceived as necessary to meet basic survival needs, try to engage the patient in services and find another way to meet basic needs*. If high-risk behavior is associated with obtaining a drug on which the patient is dependent, continually offer detoxification/substance abuse treatment as an alternative. Medical and HIV prevention issues specific to adolescent and older HIV-infected women should be addressed by

knowledgeable providers experienced with these populations (see DHHS (HAB), 2005; Weinreb et al., 1999).

Homeless youth There is a high prevalence of HIV infection among runaway and homeless adolescents; HIV seropositivity is associated with intravenous drug use, male homosexual/bisexual activity, prostitution, and history of another sexually transmitted disease (Stricof et al., 1991). Most homeless adolescents and youth (ages 14–24) have been abused or neglected. HIV infection, usually identified in 18–20 year olds (ages when most are willing to be tested), is often seen as an asset by homeless youth because it may increase their access to services (substance abuse treatment, medical services, and shelter). Adolescents and youth tend to be more recently infected than older adults, who are likely to be more acutely ill when identified. Younger patients have more time to address psychosocial problems; treatment is not as urgent. Homeless adolescents and youth are often developmentally less advanced than peers of the same chronological age; concrete thinking predominates over abstract reasoning skills, according to providers who are experienced with this population. *When discussing behavioral change with these patients, focus on immediate concerns rather than possible future consequences*. (Ammerman et al., 2004)

Sexual minorities Homeless sexual minorities (gay, lesbian, bisexual, transgender [GLBT] persons) need special support to counteract extreme marginalization, victimization, and frequent exclusion from mainstream health care systems. A significant number of homeless adolescents and youth are sexual minorities who have been rejected by their families and communities. Victimization, psychopathology, use of addictive substances, and multiple sexual partners increase their risk for HIV infection (Ammerman et al., 2004; Cochron et al., 2002). *Create a safe and nondiscriminatory clinical environment for all HIV-infected GLBT patients; build trust and rapport with these patients, and assure their access to comprehensive health care and facilitate access to housing*.

Transgender adults and adolescents (male-to-females and female-to-males) comprise a significant proportion of the homeless population in some areas. Injection of hormones or other drugs with nonsterile needles and unprotected sex with infected partners place some of these individuals at especially high risk for HIV (Herbst et al., 2008; Lombardi, 2001; Clements-Nolle et al., 2001). Among sexual minorities, persons with gender variance are least likely to receive appropriate medical care; many have been denied screening and treatment for life-threatening diseases such as cervical cancer and HIV infection. Give these patients the information they need to make informed choices. For many transgender patients the only way to become engaged in care is by offering hormonal treatment. Underground selling of hormones and silicone implants are growing markets nationwide. Educate yourself about gender reassignment hormonal treatment (see Tom Waddell Health Center, 2006). *Educate patients using injected hormones about clean needle exchange*. Prescribe the syringes along with the hormone and *explain gender-related health risks*—e.g., a male taking estrogen may have increased risk for thromboembolism and cervical cancer; a female taking testosterone still requires screening for breast and cervical cancer, and runs the risk of hair

loss and early cardiac disease. This information should be conveyed to promote informed choices, not to frighten or dissuade.

Immigrants Although homeless immigrants from certain areas may be at high risk for HIV (e.g., Africa) and tuberculosis (Mexico, the Philippines, and Southeast Asia), their access to prophylaxis and treatment may be limited. Undocumented immigrants may be reluctant to seek care for fear of being deported. Language and cultural barriers often compound financial barriers to health care. *Provide linguistically appropriate and culturally competent health services* (National Health Care for the Homeless Council, 2006). Although immigrants who have been granted asylum may qualify for Medicaid as refugees, many immigrants, undocumented or not, are explicitly barred from the Medicaid program by Federal law (see Post, 2001, 16–17). *Assure access to health care for individuals with infectious diseases, regardless of their immigration status*.

Follow-Up

- **Contact information** *At every visit, seek contact information (telephone/cell phone numbers, mailing/email addresses) for the patient, a family member or friend with a stable address, the shelter where the patient is currently staying or other location where s/he might be found, and the patient's case manager and health care providers*. A clinician should be available to the patient via beeper or other means, 24 hours a day.
- **More frequent follow-up** *Try to see homeless patients more frequently, especially early in the course of treatment*. Most HIV patients are told to return monthly; homeless patients should return within 1 to 2 weeks. Follow-up intervals also depend on comorbidities. Contact the patient a few days after starting medications and schedule a return visit within a week. Review adherence; give the patient a pillbox, if desired. At the beginning of a therapeutic relationship, *reinforce the patient's understanding of the plan of care repeatedly*. Ask if medications were missed and if so, why they were missed and what happened (e.g., stolen, forgot to take them while binging). Frequent contact encourages patient bonding and willingness to return to the clinic on a drop-in basis. Let homeless clients come back as frequently as is comfortable for them. *Be mindful that relationship-building is as important as primary care interventions* and may be more time-consuming initially.
- **Drop-in system** Create a routine drop-in time at primary care clinics (avoid Monday holidays) with no appointment required for new patients. *Encourage routine follow-up for established patients, supplemented by an open-door policy for drop-ins*. A drop-in system is far more effective than appointments for people who are disorganized or whose lives are chaotic.
- **Help with appointments** Help patients make and keep clinical appointments and routinely remind them of their appointments. *Find out what their regular commitments are (e.g., when and where they receive wages or disability checks) and at what time(s) of day they can come to the clinic*. Recognize that a homeless patient may be forced to miss a meal at a soup kitchen if the clinic appointment runs past serving hours. In communities where the number of homeless individuals far exceeds available shelter beds, competition for such beds can be significant, requiring individuals to line up in the late afternoon to secure a bed. Consequently, afternoon primary care

appointments can be problematic, forcing patients to choose between their provider and having a safe place to sleep that evening.

- **Incentives** Provide personal hygiene items, meal vouchers, and/or cash incentives for use of services at least once weekly. *Provide incentives for every kept appointment or group meeting attended—e.g., carfare plus a meal voucher ("carefare")*. Escort each patient to the first clinic appointment; explain how to obtain carfare for the next visit and demonstrate how to use the meal voucher. *Provide a client advocate to accompany the patient to appointments for MRI, colposcopy, or ambulatory surgery*. Be the family member or friend most people call on if they have to do something frightening or unpleasant.
- **Transportation** *Provide transportation to and from specialty referrals*. Arrange to pick up new patients and those unable to come to the primary care clinic on their own.
- **Outreach & intensive case management** *Provide medical outreach to unstably housed HIV-infected individuals—on the streets, in shelters, in drop-in centers or transitional long-term housing for homeless people living with AIDS.* Outreach services that include case management, nutrition supplementation, harm-reduction education, needle exchange, and provision of personal hygiene items and/or cash incentives for use of services at least once weekly have been demonstrated to result in improved access to regular health care and higher utilization of PCP prophylaxis and antiretroviral medications (Kushel et al., 2006; Cunningham et al., 2005; Bamberger et al., 2000). Use a clinical team to support the patient and promote continuity of care, which is essential for good HIV care. Use a clinical team to support the patient and promote continuity of care, which is essential for good HIV care.

  Visit inpatients daily to reinforce engagement, facilitate discharge planning, and promote better follow-up care (e.g., call the library, help patients get methadone/nicotine patches, talk with patients about where to go after they leave the hospital). Encourage discharge to a nursing/recuperative care facility, if available. Establish and maintain contact with other service providers who know your patient (make phone calls and have lunch from time to time). Ask the patient to sign a release, in compliance with HIPAA requirements, so that you can share health information with other clinicians and service providers when s/he leaves your care. Information sharing is important, particularly during transition from homelessness to transitional or permanent housing, to identify any variations in the patient's behavior that may indicate a change in health status or problems with adherence. Be compassionate and caring.

- **Peer support** *Offer group activities to create positive peer support for patients having difficulty with ART*—e.g., start a "breakfast club"; provide food and encourage members to take medications together; include staff to work with clients on medical and social issues in a social setting. This helps patients to establish a regular wake-up time, begin the day with food and medications, share resources and coping strategies, and receive both medical and social support. *Create opportunities for group leisure or quality of life activities to develop or deepen support networks and promote a sense of self-worth*.

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

REFERENCES SUPPORTING THE RECOMMENDATIONS

References open in a new window

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

This guideline was adapted from the following sources:

U.S. Department of Health and Human Service (DHHS) Guidelines for the Use of Antiretroviral Agents in HIV-1- Infected Adults and Adolescents, January 29, 2008.

DHHS Public Health Service Task Force Recommendations for Use of Antiretroviral Drugs in Pregnant HIV-1-infected Women for Maternal Health and Interventions to Reduce Perinatal HIV-1 Transmission in the United States, July 8, 2008 (http://aidsinfo.nih.gov/guidelines/).

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

Simple adaptations of established clinical guidelines for human immunodeficiency virus (HIV) infection and acquired immune deficiency syndrome (AIDS) will maximize opportunities for homeless patients to receive the optimum standard of care and reduce risk of HIV transmission.

POTENTIAL HARMS

- Common side effects of active antiretroviral therapy (ART) that are particularly burdensome for homeless people:
    - *Neuropsychiatric and iatrogenic effects of efavirenz* (Sustiva®), which causes sedation (dangerous for street dwellers), can exacerbate underlying mental illness, and may cause birth defects
    - Gastrointestinal side effects, complicated by limited access to restrooms/bathing facilities and lack of regular meals: *diarrhea* (particularly from some protease inhibitors); nausea (from taking medications on an empty stomach)
    - *Peripheral neuropathy* (numbness/tingling in extremities), exacerbated by poor nutrition and constant walking
- *Drug resistance* in patients having trouble with adherence (resistance to whole drug class and cross-resistance can result from a single mutation)
- *Reduced efficacy of methadone therapy* for persons with opioid dependence, associated with non-nucleoside reverse transcriptase inhibitors (NNRTIs, e.g., nevirapine and efavirenz) and certain protease inhibitors (particularly ritonavir)

- *Skin damage* from medications that increase sensitivity to sun exposure (e.g., TMP/SMX [Bactrim], commonly prescribed for *Pneumocystis carinii* pneumonia [PCP] prophylaxis); increased risk for street dwellers
- Rare but life-threatening *drug toxicities* from antiretroviral therapy (abacavir hypersensitivity reaction, hepatic necrosis, Stevens Johnson Syndrome, pancreatitis, lactic acidosis)

CONTRAINDICATIONS

CONTRAINDICATIONS

- Some medications may be contraindicated if the patient has a history of pancreatitis or alcoholism, or should be used with caution and more frequent monitoring with co-occurring mental illness, hepatitis C, high cholesterol, or diabetes.
- Abacavir is contraindicated for any patient testing positive for HLA*B-57 (50% chance of severe hypersensitivity reaction).

QUALIFYING STATEMENTS

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- The information and opinions expressed in the guideline are those of the Advisory Committee for the Adaptation of Clinical Guidelines for Homeless Patients with human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS), not necessarily the views of the U.S. Department of Health and Human Services, the Health Resources and Services Administration, or the National Health Care for the Homeless Council, Inc.
- Clinical practice guidelines for people with HIV/AIDS who are homeless are fundamentally the same as for those who are stably housed. Nevertheless, primary care providers who routinely serve homeless patients recognize an increased need to take their living situations and co-occurring disorders into consideration when working with their patients to develop a plan of care. The recommendations in this guide were developed to assist clinicians who provide HIV care for homeless adults and adolescents. It is expected that these simple adaptations of established clinical guidelines will maximize opportunities for these individuals to receive the optimum standard of care.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

The guideline has been distributed to Health Care for the Homeless grantees across the United States. In addition, links to the document are posted on Web sites maintained by the National Health Care for the Homeless Council (www.nhchc.org) and the HIV/AIDS Bureau (HAB)/HRSA/HHS. HAB also sent a publication announcement to all grantees. Adapted clinical guidelines including this one are also being used in workshops at national and regional conferences (e.g., Housing and Homeless Institutes sponsored by the HIV/AIDS Bureau, and

National Health Care for the Homeless Conferences provided with support from HRSA/HHS).

The recommendations in this guideline presuppose the following model of health care delivery to unstably housed individuals.

Model of Care

Service Delivery Design

- **Flexible service system** Access to care for initial evaluation or ongoing treatment depends on the existence of a flexible service system that homeless individuals can use on a walk-in basis or through outreach workers. "One-size-fits-all" systems of care are inadequate to meet the complex needs of homeless people. *Help to identify and resolve system barriers that impede access to care, recognizing that some barriers are not within the patient´s capacity to control*. Don't focus on what the patient is not doing (e.g., on "noncompliance" with a plan of care); instead focus on what service providers can offer to enable homeless patients to obtain effective treatment, such as assuring service flexibility and providing appropriate medical assistance to anyone who walks into the clinic. Be creative; enlist the patient´s assistance, and with his/her permission, utilize everyone in the community with whom s/he has contact to facilitate delivery of care.
- **Integrated, interdisciplinary model of care** Successful initiation and maintenance of human immunodeficiency virus (HIV) therapy requires a holistic approach to care provided by an interdisciplinary clinical team, including case managers, social workers, medical providers, mental health professionals, and substance abuse counselors who share care planning and coordination. The patient is an essential member of this team. Optimally, medical and psychosocial services should be easily accessible at the same location; fragmented service systems do not work for homeless people. Those with multiple and complex health problems need integrated services that are accessible from multiple points of service, outreach and engagement, and stabilization in short- and long-term housing. *Coordinate medical and psychosocial services across multiple disciplines and delivery systems, including the provision of food, housing, and transportation to service sites*.
- **Access to mainstream health system** Ensure that all people with HIV infection have access to the mainstream health care system. HIV care involves multiple medical specialties, including infectious diseases, cardiology, hematology, nephrology, obstetrics/gynecology, psychiatry, neurology, dermatology, and pulmonary medicine. Full collaboration between primary care providers and specialists is the only effective treatment and management strategy. *Network with community service providers who are sensitive to the needs of homeless patients to facilitate specialty referrals; assist with transportation and accompany patients to appointments*. Problems that distinguish homeless HIV patients from others are primarily system and provider access problems, rather than client problems or differences in intent or desire to adhere to a plan of care. Treatment readiness is a function of the degree to which the mainstream health care system is accessible and welcoming to these patients.

Engagement

- **Outreach** *Use outreach workers, lay educators (promotoras), and peer advocates to locate hard-to-reach individuals and encourage them to obtain medical care*. View each patient contact as an opportunity for medical and psychosocial evaluation. *Offer diagnostic testing and treatment at outreach sites* whenever possible. Remember that unmet basic needs may prevent a person from seeking health care. Promote engagement by including nutritious snacks as part of outreach. Offer to bring patients to the grocery store or food bank, and use this as an opportunity to learn about their needs and do a psychosocial history. Homeless HIV-positive youth may be especially reluctant to seek care; use a "roving case manager" to help them connect with available health and social services. Work with religious leaders and faith communities ("health ministries") to encourage their participation in outreach activities. *Maintain a consistent presence in places where homeless people congregate and become a trustworthy member of their community; fulfill any agreements negotiated with homeless persons*. Be mindful that when you approach a homeless person you are essentially entering his/her home. Find creative ways to seek permission to enter that home and respect the person's right to decline your request. Many patients are "referred" to outreach workers by another patient who has found the outreach worker to be respectful, reliable, and trustworthy.
- **Clinical team** *Nonjudgmental and supportive patient interactions with all members of the clinical team are essential to successful engagement*. The team should include professionals and paraprofessionals with strong engagement skills who make themselves available to listen to patients and help them address obstacles to care. This is especially important for homeless people who experience extreme social isolation and may have no one else to listen to their concerns. A team member with strong engagement skills should see the patient first. Often that team member will need to "lend" his or her relationship with the patient to other team members via joint visits. *Specifically address psychosocial barriers to health as well as medical issues, employing an intensive case management model*.
- **Therapeutic relationship** Successful HIV care requires effective engagement skills to meet medical as well as psychosocial needs. Engagement involves building mutual trust with people who are alienated from traditional health care systems. Recognize that *caring for homeless patients is as much about building relationships as about clinical expertise*. Spend time getting to know your patients; listen to their concerns and engage with their interests. Both the quality and frequency of encounters are important in building a therapeutic relationship with homeless people. Realize that *seeing the same provider over time facilitates engagement*. Be aware that *engagement of homeless patients often takes a long time*. Small, brief conversations may be all a person can tolerate at first, but the length of an encounter will grow as the patient's comfort level increases. Often clinicians presume that a person isn't interested after they fail to get very far in one or two contacts. Be patient and persistent; listen well. Measure success in very small increments. For weeks a patient may only accept a sandwich from the provider; one day s/he may allow a blood pressure check while getting a sandwich. This is success. *Take good care of professional staff to promote provider retention and continuity of patient care*. It is stressful for dedicated providers when they feel an urgency to address a patient's medical needs but are unable to do so because the therapeutic relationship has not matured sufficiently from the patient's perspective. Provide consistent and meaningful supervision and ongoing training for new and seasoned providers. Encourage

debriefing and other wellness activities. Develop creative ways to recognize and celebrate small successes along the way. Well tended staff will stay with your program and will have the inner resources to engage the most difficult of patients.

IMPLEMENTATION TOOLS

Personal Digital Assistant (PDA) Downloads
Pocket Guide/Reference Cards

For information about availability, see the "Availability of Companion Documents" and "Patient Resources" fields below.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Living with Illness
Staying Healthy

IOM DOMAIN

Effectiveness
Patient-centeredness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

Menchaca M, Martinez L, Stewart J, Treherne L, Vicic W, Audain G. Post P, editor(s). Adapting your practice. Treatment and recommendations for homeless patients with HIV/AIDS. 2nd ed. Nashville (TN): Health Care for the Homeless Clinicians' Network, National Health Care for the Homeless Council, Inc.; 2008. 62 p. [118 references]

ADAPTATION

This guideline was adapted from the following sources, the U.S. Department of Health and Human Service (DHHS) Guidelines for the Use of Antiretroviral Agents in HIV-1- Infected Adults and Adolescents, January 29, 2008, and the DHHS Public Health Service Task Force Recommendations for Use of Antiretroviral Drugs in Pregnant HIV-1-infected Women for Maternal Health and Interventions to Reduce Perinatal HIV-1 Transmission in the United States, July 8, 2008 (http://aidsinfo.nih.gov/guidelines/).

Recommendations found in these guidelines are not restated in this document except to clarify a particular adaptation.

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2003 (revised 2008)

GUIDELINE DEVELOPER(S)

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FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

The Health Care for the Homeless (HCH) Clinicians' Network has a stated policy concerning conflict of interest. First, all transactions will be conducted in a manner to avoid any conflict of interest. Secondly, should situations arise where a Steering Committee member is involved in activities, practices or other acts which conflict with the interests of the Network and its Membership, the Steering Committee member is required to disclose such conflicts of interest and excuse him or herself from particular decisions where such conflicts of interest exist.

No conflicts of interest were noted during preparation of this guideline.

GUIDELINE STATUS

This is the current release of the guideline.

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GUIDELINE AVAILABILITY

Electronic copies: Available in Portable Document Format (PDF) from the National Health Care for the Homeless Council, Inc. Web site.

Print copies: Available from the National Health Care for the Homeless Council, Inc., P.O. Box 60427, Nashville, TN 37206-0427; Phone: (615) 226-2292

AVAILABILITY OF COMPANION DOCUMENTS

Abbreviated versions of this and other adapted clinical guidelines for the care of homeless patients are available for download to hand-held devices from the National Health Care for the Homeless Council Website.

The National Health Care for the Homeless Council has developed a variety of resources to support health care providers in their service to persons experiencing homelessness. These resources are available for purchase as well as free download from the National Health Care for the Homeless Council Website.

PATIENT RESOURCES

None available

NGC STATUS

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